

Attorney Docket No.: 015114-067400US  
Client Ref. No.: A1051

PTO/SB/01A (08-03)

Approved for use through 06/30/2006. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN  
APPLICATION DATA SHEET (37 CFR 1.76)**

**Title of Invention**    **ESTIMATING QUALITY DURING EARLY SYNTHESIS**

As the below named inventor(s), I/we declare that:

This declaration is directed to:

- ☒ The attached application, or  
☐ Application No. , filed on ,  
☐ as amended on \_\_\_\_\_ (if applicable);

I/we believe that I/we am/are the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought;

I/we have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I/we acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me/us to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application.

All statements made herein of my/our own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

**FULL NAME OF INVENTOR(S)**

Inventor 1    Yean-Yow Hwang    Date: 12-01-2003

Signature:     Citizen of: United States

Inventor 2    Babette van Antwerpen    Date: \_\_\_\_\_

Signature: \_\_\_\_\_    Citizen of: Netherlands

Inventor 3    Richard Yuan    Date: \_\_\_\_\_

Signature: \_\_\_\_\_    Citizen of: Peoples Republic of China

☐ Additional inventors are being named on \_\_\_\_\_ additional form(s) attached hereto.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**FULL NAME OF INVENTOR(S)**

Inventor 1 Yean-Yow Hwang Date: \_\_\_\_\_

Signature: \_\_\_\_\_ Citizen of: United States

Inventor 2 Babette van Antwerpen Date: 11/20/03

Signature: Babette van Antwerpen Citizen of: Netherlands

Inventor 3 Richard Yuan Date: 11/20/03

Signature: Richard Yuan Citizen of: Peoples Republic of China

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PTO/SB/81 (02-01)

Approved for use through 10/31/2002. OMB 0651-0035  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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<b>POWER OF ATTORNEY OR AUTHORIZATION OF AGENT</b>	<b>Application Number</b>	Unassigned
	<b>Filing Date</b>	Herewith
	<b>First Named Inventor</b>	Yean-Yow Hwang
	<b>Title</b>	ESTIMATING QUALITY DURING EARLY SYNTHESIS
	<b>Group Art Unit</b>	Unassigned
	<b>Examiner Name</b>	Unassigned
	<b>Attorney Docket Number</b>	15114-067400US

I hereby appoint:

☒ Practitioners at Customer Number  
OR

26059

Place Customer  
Number Bar Code  
Label here

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

☐ The above-mentioned Customer Number.

OR

☐ Practitioners at Customer Number

☐ Firm or  
Individual Name

Address

Address

City

State

ZIP

Country

Telephone

Fax

I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

**SIGNATURE of Applicant or Assignee of Record**

Name

Derek Minihane, Director, Intellectual Property Law & Assistant Secretary

Signature

Date

12/11/03

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☒ \*Total of 1 forms are submitted.

**CERTIFICATE UNDER 37 C.F.R. § 3.73(b)**

Applicant: Yean-Yow Hwang, Babette van Antwerpen, and Richard Yuan

Application No.: Unassigned Filed: Herewith

For: ESTIMATING QUALITY DURING EARLY SYNTHESIS

Altera Corporation, a Corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

certifies that it is assignee of the patent application identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame(s) \_\_\_\_\_, and for which a copy thereof is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the U.S. Patent and Trademark Office at Reel \_\_\_\_\_, Frames \_\_\_\_\_, or for which a copy thereof is attached..
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the U.S. Patent and Trademark Office at Reel \_\_\_\_\_, Frames \_\_\_\_\_, or for which a copy thereof is attached.

☒ Copies of assignments or other documents in the chain of title are attached.

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 12/11/03  
Name: Derek Minihi  
Title: Director, Intellectual Property & Assistant Secretary

Signature: 

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, YEAN-YOW HWANG of 4231 Suzanne Drive, Palo Alto, California 94306; **BABETTE VAN ANTWERPEN** of 1116 Doyle Place, Mountain View, California 94040; and **RICHARD YUAN** of 20199 Suisun Drive, Cupertino, California 95014, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: ESTIMATING QUALITY DURING EARLY SYNTHESIS

Date(s) of execution of Declaration:

Filing Date:

Application No.: ; and

**COPY**

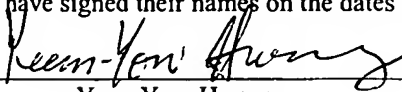
WHEREAS, **ALTERA CORPORATION**, a corporation of the state of Delaware, located at 101 Innovation Drive, San Jose, California 95134, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: 12-01-2003

  
Yean-Yow Hwang

Dated: \_\_\_\_\_

\_\_\_\_\_  
Babette van Antwerpen

Dated: \_\_\_\_\_

\_\_\_\_\_  
Richard Yuan

ASSIGNMENT OF PATENT APPLICATION

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Dated: \_\_\_\_\_

Yean-Yow Hwang

Dated: 11/20/03

Babette van Antwerpen

Dated: 11/20/03

Richard Yuan